

A large, stylized letter 'A' is formed using the characters 'S' and 'Y'. The left and right vertical strokes are composed of 'S' characters, while the central vertical stroke and the two diagonal strokes are composed of 'Y' characters. The 'A' is symmetrical and has a bold, blocky appearance.

[illegible]



(1) 64 ADJUST OUTER MODE STACK POINTER

```
0000 1      .TITLE SYSADJSTK - SYSTEM SERVICE ADJUST OUTER MODE STACK POINTER
0000 2      .IDENT 'V04-000'
0000 3
0000 4
0000 5 *****
0000 6 *****
0000 7 *
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0000 25 *
0000 26 *****
0000 27 *****
0000 28 D. N. CUTLER 9-JAN-77
0000 29
0000 30
0000 31 MODIFIED BY:
0000 32
0000 33 V03-003 TMK0001      Todd M. Katz      19-Nov-1983
0000 34      Change a BSBW (to EXE$EXPANDSTK) to a JSB.
0000 35
0000 36 V03-002 SRB0068      Steve Beckhardt    22-Feb-1983
0000 37      Removed most of ACG0310.
0000 38
0000 39 V03-001 ACG0310      Andrew C. Goldstein, 31-Jan-1983 13:37
0000 40      Fix stack adjustment when stack is expanded
0000 41
0000 42 02      RIH0031      RICHARD I. HUSTVEDT    6-AUG-1979
0000 43      ADD CALL TO EXE$EXPANDSTK TO IMPLEMENT AUTOMATIC STACK
0000 44      EXPANSION FOR USER MODE STACK.
0000 45
0000 46 SYSTEM SERVICE ADJUST OUTER MODE STACK POINTER
0000 47
0000 48 MACRO LIBRARY CALLS
0000 49
0000 50
0000 51 $PSLDEF      :DEFINE PROCESSOR STATUS FIELDS
0000 52 $SSDEF      :DEFINE SYSTEM STATUS VALUES
0000 53
0000 54
0000 55 LOCAL SYMBOLS
0000 56
0000 57 ARGUMENT LIST OFFSET DEFINITIONS
```



SYSADJSTK  
V04-000

- SYSTEM SERVICE ADJUST OUTER MODE STACK I 10  
16-SEP-1984 01:37:40 VAX/VMS Macro V04-00  
5-SEP-1984 03:48:34 [SYS.SRC]SYSADJSTK.MAR;1

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	0000	58 ;
	0000	59
00000004	0000	60 ACMODE=4
00000008	0000	61 ADJUST=8
0000000C	0000	62 NEWADR=12

;ACCESS MODE TO ADJUST STACK POINTER FOR  
;16-BIT SIGNED ADJUSTMENT VALUE  
;ADDRESS OF LONGWORD TO STORE UPDATED VALUE



```
0000 64 .SBTTL ADJUST OUTER MODE STACK POINTER
0000 65 :+
0000 66 EXESADJSTK - ADJUST OUTER MODE STACK POINTER
0000 67
0000 68 THIS SERVICE PROVIDES THE CAPABILITY TO ADJUST THE STACK POINTER FOR
0000 69 A MODE THAT IS LESS PRIVILEGED THAN THE CALLING ACCESS MODE. IT CAN BE
0000 70 USED TO LOAD AN INITIAL VALUE INTO THE SPECIFIED MODE'S STACK POINTER OR
0000 71 TO ADJUST ITS CURRENT VALUE.
0000 72
0000 73 INPUTS:
0000 74
0000 75 ACMODE(AP) = ACCESS MODE TO ADJUST STACK POINTER FOR.
0000 76 ADJUST(AP) = 16-BIT SIGNED ADJUSTMENT VALUE.
0000 77 NEWADR(AP) = ADDRESS OF LONGWORD TO STORE UPDATED VALUE.
0000 78 IF THE INITIAL CONTENTS OF NEWADR(AP) ARE NONZERO,
0000 79 THEN THE VALUE IS TAKEN AS THE CURRENT TOP OF STACK.
0000 80 ELSE THE CURRENT STACK POINTER FOR THE SPECIFIED MODE
0000 81 IS USED.
0000 82
0000 83 OUTPUTS:
0000 84
0000 85 R0 LOW BIT CLEAR INDICATES FAILURE TO ADJUST STACK POINTER.
0000 86
0000 87 R0 = SS$ ACCVIO - LONGWORD TO STORE UPDATED STACK POINTER
0000 88 OR PART OF NEW STACK SEGMENT CANNOT BE WRITTEN BY
0000 89 CALLING ACCESS MODE.
0000 90
0000 91 R0 = SS$ NOPRIV - SPECIFIED ACCESS MODE IS EQUAL OR MORE
0000 92 PRIVILEGED THAN CALLING ACCESS MODE.
0000 93
0000 94 R0 LOW BIT SET INDICATES SUCCESSFUL COMPLETION.
0000 95
0000 96 R0 = SS$_NORMAL - NORMAL COMPLETION.
0000 97 :-
0000 98
0000 99 .PSECT YSEXEPAGED
0000 100 .ENTRY EXESADJSTK, ^M<R2,R3,R4,R5,R6>
53 04 AC 55 0C AC 007C 0000 101 MOVL NEWADR(AP),R5 ;GET ADDRESS TO STORE NEW STACK VALUE
53 52 02 16 55 18 0013 102 EXTZV #0,#2,ACMODE(AP),R3 ;GET ACCESS MODE TO MODIFY STACK POINTER FOR
53 52 02 16 55 18 0013 103 MOVPSL R2 ;READ CURRENT PSL
53 52 02 16 55 18 0013 104 CMPZV #PSL$V_PRVMOD,#PSL$S_PRVMOD,R2,R3 ;PREVIOUS MODE MORE PRIVILEGED?
53 52 02 16 55 18 0013 105 BGEQ 60$ ;IF GEQ NO
53 52 02 16 55 18 0013 106 IFNOWRT #4,(R5),40$ ;CAN NEW STACK VALUE BE WRITTEN?
53 52 02 16 55 18 0013 107 5$: MOVL (R5),R6 ;GET SPECIFIED STACK VALUE
53 52 02 16 55 18 0013 108 BNEQ 10$ ;IF NEQ VALUE SPECIFIED
53 52 02 16 55 18 0013 109 MFPR R3,R6
53 52 02 16 55 18 0013 110 10$: CVTWL ADJUST(AP),R0 ;GET ADJUSTMENT VALUE
53 52 02 16 55 18 0013 111 ADDL R0,R6 ;CALCULATE NEW TOP OF STACK
53 52 02 16 55 18 0013 112 MNEGL R0,R0 ;ALLOCATION OF STACK SPACE?
53 52 02 16 55 18 0013 113 BLEQ 30$ ;IF LEQ NO
53 52 02 16 55 18 0013 114 MOVL R6,R1 ;COPY NEW STACK VALUE
53 52 02 16 55 18 0013 115 CVTWL #-4X200,R2 ;SET ADDITION CONSTANT
53 52 02 16 55 18 0013 116 20$: IFNOWRT R0,(R1),40$,R3 ;CAN ALLOCATED STACK SEGMENT BE WRITTEN?
53 52 02 16 55 18 0013 117 SUBL R2,R1 ;UPDATE ADDRESS IN STACK
53 52 02 16 55 18 0013 118 MOVAW (R0)[R2],R0 ;UPDATE REMAINING LENGTH
53 52 02 16 55 18 0013 119 BGEQ 20$ ;IF GEQ MORE TO CHECK
53 52 02 16 55 18 0013 120 30$: MTPR R6,R3 ;
```

```

65 56 D0 0049 121      MOVL R6,(R5)      ;STORE NEW STACK VALUE
50 01 3C 004C 122      MOVZWL #SS$_NORMAL,R0 ;SET NORMAL COMPLETION
      04 004F 123      RET
53 03 D1 0050 124 40$: CMPL #PSL$_USER,R3    ;IS THIS FOR USER MODE STACK?
      12 0053 125      BNEQ 50$             ;BR IF NOT
      3E BB 0055 126      PUSH R1,R2,R3,R4,R5 ;SAVE REGISTERS
52 51 D0 0057 127      MOVL R1,R2          ;STACK BASE ADDRESS
00000000'EF 16 005A 128      JSB EX$EXPANDSTK ;AUGMENT STACK TO MAKE ACCESSIBLE
      3E BA 0060 129      POP R1,R2,R3,R4,R5 ;RESTORE REGISTERS
      B6 50 E8 0062 130      BLBS R0,5$     ;REPEAT CHECKS
      04 0065 131      RET                 ;RETURN ERROR CODE
50 0C 3C 0066 132 50$: MOVZWL #SS$_ACCVIO,R0 ;SET ACCESS VIOLATION
      04 0069 133      RET
50 24 3C 006A 134 60$: MOVZWL #SS$_NOPRIV,R0 ;SET NO PRIVILEGE
      04 006D 135      RET
      006E 136
      006E 137      .END
```



SYSADJSTK  
Symbol table

L 10

- SYSTEM SERVICE ADJUST OUTER MODE STACK 16-SEP-1984 01:37:40 VAX/VMS Macro V04-00  
5-SEP-1984 03:48:34 [SYS.SRC]SYSADJSTK.MAR;1

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ACMODE	= 00000004
ADJUST	= 00000008
EXE\$ADJSTK	00000000 RG 02
EXE\$EXPANDSTK	***** X 02
NEWADR	= 0000000C
PSL\$C_USER	= 00000003
PSL\$\$PRVMOD	= 00000002
PSL\$VPRVMOD	= 00000016
SS\$ACCVIO	= 0000000C
SS\$NOPRIV	= 00000024
SS\$NORMAL	= 00000001

-----  
! Psect synopsis !  
-----

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 ( 0.)	00 ( 0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$AB\$\$	00000000 ( 0.)	01 ( 1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
Y\$EXEPAGED	0000006E ( 110.)	02 ( 2.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

-----  
! Performance indicators !  
-----

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.10	00:00:00.43
Command processing	112	00:00:00.60	00:00:04.80
Pass 1	202	00:00:04.25	00:00:14.53
Symbol table sort	0	00:00:00.69	00:00:02.12
Pass 2	42	00:00:00.76	00:00:05.12
Symbol table output	3	00:00:00.02	00:00:00.03
Psect synopsis output	2	00:00:00.03	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	392	00:00:06.45	00:00:27.07

The working set limit was 1200 pages.  
22668 bytes (45 pages) of virtual memory were used to buffer the intermediate code.  
There were 30 pages of symbol table space allocated to hold 451 non-local and 7 local symbols.  
137 source lines were read in Pass 1, producing 16 object records in Pass 2.  
10 pages of virtual memory were used to define 9 macros.

-----  
! Macro library statistics !  
-----

Macro library name	Macros defined
_\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	1
-\$255\$DUA28:[SYS.LIB]STARLET.MLB;2	5
TOTALS (all libraries)	6

516 GETS were required to define 6 macros.

There were no errors, warnings or information messages.



SYSADJSTK  
VAX-11 Macro Run Statistics

M 10  
- SYSTEM SERVICE ADJUST OUTER MODE STACK 16-SEP-1984 01:37:40 VAX/VMS Macro V04-00  
5-SEP-1984 03:48:34 [SYS.SRC]SYSADJSTK.MAR;1

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MACRO/LIS=LIS\$:SYSADJSTK/OBJ=OBJ\$:SYSADJSTK MSRC\$:SYSADJSTK/UPDATE=(ENH\$:SYSADJSTK)+EXECMLS/LIB



0381

AH-BT13A-SE  
VAX/VMS V4.0

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